



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,736	08/25/2003	Mikhail R. Levit .	HT3630 US DIV	8302

23906 7590 05/05/2004

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
BARLEY MILL PLAZA 25/1128
4417 LANCASTER PIKE
WILMINGTON, DE 19805

EXAMINER

FORTUNA, JOSE A

ART UNIT	PAPER NUMBER
----------	--------------

1731

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/648,736

Applicant(s)

LEVIT, MIKHAIL R.

Examiner

José A Fortuna

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/25/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1731

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 19-20 and 22, 24-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Tokarsky, US Patent No. 4,698,267.

Regarding claim 19, Tokarsky teaches a method of making high-density papers including para-aramid fibers selected from para-aramid pulp, para-aramid floc or mixtures thereof, see abstract. Tokarsky teaches that if a binder is used it should be added between 5-25, see column 2, lines 20-24, which indicates that the binder is not necessary, but a preferred embodiment. Moreover in column 3, lines 44-46, Tokarsky teaches that binder is not used in a batch process, which reads on the claims as claimed. Claim 1 specifically teaches the use from 50-100 of Floc and that floc is primarily para-aramid floc. Regarding claim 20, Tokarsky teaches that the floc have a length between 0.8 to 12.7 mm, see column 1, lines 60-63. Regarding claims 22, 24-25, Tokarsky teaches the calendaring of the web and the resin impregnation of the laminate to form a pre-peg, see column 3, lines 50-65, column 5, line 67 through column 6, line 3 and column 6, lines 30-37, see also examples.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 19-20 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Memeger, Jr., US Patent No. 4,515,656.

Regarding claims, 19 and 24, Memeger, Jr. teaches a non-woven sheet which is made using up to 80% by weight of floc, column 2, lines 1-13 and without using a binder, column 2, line 60 through column 3, line 4. Memeger, Jr. teaches also that the flocs are preferably para-aramid fibers, column 3, lines 11-21. In column 5, line 45 through column 6, line 9, and Memeger, Jr. teaches the procedure to make the paper, i.e., wet laid, starting with a consistency within the claimed range. Regarding claim 20, Memeger, Jr. discloses floc of less than 2.5 cm (25mm) in length, column 4, lines 36-51.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tokarsky, cited above.

Tokarsky invention has been previously discussed see above. Tokarsky fails to teach the hydroentangling of the wet/dried non-woven sheet. However, hydroentangling is a very well known operation and its use would have been obvious to one of ordinary skill in the art, since he/she would have a reasonable expectation of success if the web taught by Tokarsky were hydroentangled. As for claims 23, Tokarsky teaches the calendaring of the web and the resin impregnation of the laminate to form a pre-peg, see column 3, lines 50-65, column 5, line 67 through column 6, line 3 and column 6, lines 30-37, see also examples.

Conclusion


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure in the art of "Non woven para-aramid webs."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A Fortuna whose telephone number is 571-272-1188. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1731

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


José A Fortuna
Primary Examiner
Art Unit 1731

JAF